

B.Tech. SEM -V Info. Tech. 2014 Course (CBCS) : WINTER - 2018
SUBJECT-DATA COMMUNICATION & NETWORKS

Day: Saturday
Date: 24/11/2018

W-2018-2413

Time: 02.30 PM TO 05.30 PM
Max. Marks: 60

N.B:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Use of non- programmable calculator is **ALLOWED**.
- 4) Assume suitable data if necessary.

Q.1 Distinguish between Analog and Digital communication with suitable example. Discuss Digital Communication system in detail. (10)

OR

Q.1 Explain the effect of Attenuation, Limited band and Data rate limits on digital transmission. (10)

Q.2 List and explain Wireless transmission media with example in detail. (10)

OR

Q.2 State the significance of Switching in commutation networks. Briefly describe Circuit switching, Message switching and Packet switching with suitable example. (10)

Q.3 Summarize the relative advantages and disadvantages of FDM, TDM, and STDM. (10)

OR

Q.3 Describe the benefits of Spread Spectrum. With the help of diagram explain FHSS and DSSS. (10)

Q.4 With the help of diagram describe the functions of various layers of OSI model. (10)

OR

Q.4 Write the functions of Hub, Bridge, Router, Gateway, Repeater and NIC. (10)

Q.5 Draw and explain the frame format of IPv4, also explain the concept of fragmentation in detail. (10)

OR

Q.5 Write a short note on: (10)
i) Multicast Routing
ii) Concepts of OSPF.

Q.6 What is Congestion? List different factors of congestion? Explain congestion prevention policies for transport layer. (10)

OR

Q.6 How Domain Naming System functions for Internet? Explain Resource records and Name server for the Domain Name System. (10)